

INTERMODULATION DISTORTION IDENTIFICATION AND  
QUANTIZATION CIRCUIT FOR A LINEAR AMPLIFIER SYSTEM

Abstract of the Disclosure

A method and multiple carrier linear amplifier circuit reduces intermodulation distortion by sampling the multiple carrier linear amplifier radio frequency signal and detecting the sampled signal at frequency increments and quantizing and nulling the intermodulation distortion. The signal can have predetermined frequency increments  $f_0 \dots f_i$  situated in at least one of predetermined sub-bands. The sampled radio frequency signal can be mixed with the local oscillator signal to target the centers of the multiple carriers and generate an intermediate frequency signal.

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